Some New Coccidae.

By GEO. B. KING, Lawrence, Mass.

To-day, April 11th, I have just received a very pretty and distinct ant-nest species of coccid from Prof. Cockerell, for which he suggests the name *Ripersia fimbriatula*, giving also some descriptive names.

Ripersia fimbriatula n. sp. Ckll and King.

♀.—Small, oval, 1½ mm. long, 1 broad, of a light yellow color, with a marginal fringe of cottony filaments and the entire body coated with white powder. Placed in alcohol, they are light, delicate yellow tinged with green. Boiled in caustic potash, they turn to a bright red-brown color. The internal juice being removed, the derm is colorless; mouth-parts, antennæ and legs light yellow. Antenna six jointed, with the sixth longest, then three. One + two next and equal. Five is a little longer than four, which is the shortest. Formula, 63(12)54. Measurements of the several joints: (1) 40, (2) 40, (3) 56, (4) 20, (5) 32, (6) 76. All of the joints have short, thin hairs, those on the sixth being somewhat longest. Legs stout, quite bristly; middle leg, coxa 48 long. Femur, with trochanter, 160; tibia, 88; tarsus, 76; claw 20, broad; coxa, 100; trochanter, 60; tibia, 36; tarsus, 28. Claw thin, sharp, not much curved. Digitules of tarsus and claw minute, indistinct, with small knobbed ends. Anal ring normal, with the usual six but thin bristles. Caudal tubercles small, with one short hair.

Hab.—Las Vegas, New Mexico, April 7, 1901, in nest of *Lasius americana* Em. under rocks; collected by Mrs. Wilmatte P. Cockerell. Also found last year at Santa Fe, N. M., by Mr. T. D. A. Cockerell, but the material too scanty for description. This species is quite different from a yellow species found in ant nests in Massachusetts, *Ripersia flaveola* Ckll., which has practically seven jointed antennæ and is larger, although we find some individuals with only six joints, measuring as follows: joint (1) 40, (2) 44, (3) 44, (4) 36, (5) 28, (6) 72. *R. fimbriatula* seems to be nearer to a species with six jointed antennæ, which was mixed with a lot of coccids from ants' nests in Massachusetts found by me and described by Prof. Cockerell in Can. Entom., 1896, p. 223, as *R. lasii*, the latter having jointed antennæ. I propose to call this six jointed form, which is certainly distinct, *Ripersia candidata* King. Although the antennal formula of this species is nearly the same as that of *Ripersia fimbriatula*, the respective

lengths of the joints are very different, as will be seen from the following measurements: joint (1) 32, (2) 28, (3) 40, (4) 16, (5) 20, (6) 68. Formula 631254. The antennæ are also very much smaller and, in fact, the smallest of our American species. Prof. Cockerell remarks that in its marginal fringe of cottony filaments *R. fimbriatula* resembles the New Zealand *R. formicicola* Maskell.

Ripersia cockerellae n. sp.

♀.—Red-brown, oval, 2 mm. long, 1½ broad, with two caudal cottony filaments. The insect is covered with a thin coating of white powder, which gives it the appearance of being a light pink color when alive. After being put in alcohol it soon turns to a cinnamon brown and quite translucent. Boiled in caustic potash, they turn to a dark claret color.

Mounted specimens colorless. Legs, antennæ and mouth-parts ochreous. Mentum elongate, dimerous, thickly beset with short, fine hairs. Antennæ seven jointed, short, not stout. Joint seven is longest, then one, two and four next and equal, then six, which is very little larger than 5. Joint three is the shortest. Formula: 71(24)653. All of the joints have several short hairs. Measurements of the antennal joints: (1) 40, (2) 36, (3) 24, (4) 36, (5) 28, (6) 32, (7) 64.

Front leg ordinary, with the coxa 96 long. Femur, with trochanter, 180; tibia, 132; tarsus, 72; the width of coxa, 84; trochanter, 64; tibia, 28; tarsus, 28. The claw is 28 long and decidedly thinner than in any of the genus known to me. As to the digitules of the tarsus and claw, I was unable to find these. If these are present in this species they must be very minute indeed. Anal ring normal, with the usual six hairs and not very long or stout. Caudal tubercles with one not very long bristle and two short spear-shaped spines and several short, thin hairs.

Hab.—In nest of *Lasius americanus* Em., at Beulah, Sapello Canon, New Mexico. Altitude, 8000 feet. This is the highest altitude where a mealy bug has been known to live. Found by Mrs. and Prof. Cockerell, and named after Mrs. Cockerell, who was the first lady to write to me on a biological subject. The species is easily known from *R. kingii* Ckll., to which it is most allied, by its antennæ of seven joints, with the third shortest; by the leg, which has the tibia and tarsus much shorter and both equal in width; the very thin, sharp claw, the central loop being much thinner and shorter and the mentum well covered with short, fine hairs.

Phenacoccus simplex n. sp.

♀.—Oval in shape, 3 mm. long, 2 broad, of a reddish-brown color.

Body thinly covered with a white secretion. Segmentation distinct. Boiled in KOH, cleared and mounted in balsam, practically colorless except around the area of the grouped spines, which is tinged with yellowish-brown. These groups are variable in size and the spines are conical in shape, short, stout and placed close together. The dorsum is quite thickly beset with short conical spines and thin, not at all long, hairs. These not uniform in length. Legs, mouth-parts and antennæ yellowish-brown. Legs long and stout, quite hairy. Middle leg coxa 320 long; femur, with trochanter, 560; tibia, 500; tarsus, 200; claw, 60. Antenna nine jointed, measuring as follows in length: (1) 120, (2) 120, (3) 140, (4) 76, (5) 80, (6) 88, (7) 80, (8) 92, (9) 140. Formula: (39) (12) 86 (57) 4. All the joints have short, thin hairs. Segments well marked by suture. Mentum large, apical half with several long hairs.

Hab.—Lone Pine, California, on *Atriplex*. Collector unknown. Sent to Prof. Cockerell, who turned it over to me. Superficially it looks very much like a *Dactylopius*. On the same plant were some *Ceroplastes*, probably *C. irregularis* Ckll. new to California.

Aspidiotus Hederae in Australia.

By James Lidgett.

In September, 1899, I forwarded some species of Coccidæ collected in Victoria to Dr. L. O. Howard, including a species of *Aspidiotus* in situ, which was quite unknown to me and distinct from any of our Australian species. This material was subsequently handed over to Mr. C. L. Marlatt to work up, and recently I received from that gentleman a communication, in which he recognized the insect as *Aspidiotus hederæ* Vallot.

This is the first time *A. hederæ* has been discovered in the Australian region, and is, therefore, another illustration of how civilization is scattering over the earth's surface many kinds of insects. I have not yet been able to ascertain the name of the host plant, which is an exotic tree resembling American ash. It was planted fourteen years ago from Melbourne nursery stock. The trunk, branches and leaves were infested, the ♂ scales being confined to the latter.

By way of illustrating how scale insects may be—and, indeed, often are—disseminated, it may here be remarked that